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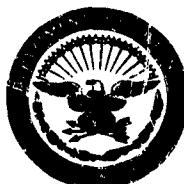
AD 404 704

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

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TECHNICAL
MEMORANDUM

(TM Series)

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Air Defense Command Program, for Air Defense Command.

SAGE Unique-to-Site Environmental
Data and Equipment Assignments
San Francisco ADS

SYSTEM

DEVELOPMENT

by

CORPORATION

D. M. McDaniel

2500 COLORADO AVE.

22 March 1963

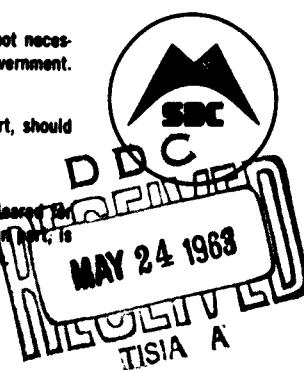
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INTRODUCTION

This volume of the TM(ADC)820 Series contains the official SAGE unique-to-site environmental data and equipment assignments which are to be used in adapting the Model 9 computer programs and in Simplex Data Distribution Unit terminal assignments for the San Francisco Air Defense Sector. Certain adaptation data such as facility locations, characteristics, and other related data which apply to all sectors, is presented in volumes 3 through 7 of this TM series. The reader is referred to Volume 0 of this series for a detailed list of contents of all volumes.

SAGE Unique-to-Site Equipment Review (USER) Committee signatures appear on page 5 of this document, with initials indicating approval, concurrence or review, as appropriate.

ADCM 55-32 currently defines adaptation data as being of two categories: 1) ADC Controlled Data; and 2) Field Controlled Data. A portion of this document is ADC Controlled Data and therefore constitutes a reason for the ADC Foreword page and the NORAD Preface page authorizing the use of this data. However, since this document also contains Field Controlled Data, e.g.: "Times-2" display data; Manual Input data; etc. it is noted here that the aforementioned military preface and foreword page do not in any way usurp the position of the Division and Sector Commanders as delegated in ADCM 55-32, but instead reflect recognition of data forwarded by those Commanders to SDC.

Discrepancies noticed in any part of this document by SDC on-site programming teams should be forwarded to the authors utilizing current established procedures. Revisions to this document will be published as data changes occur or when practical. Changes to previous data will be indicated by use of a "▷" next to the data change.

SERIES CONTENTS

VOLUME	0	Series Description
VOLUME	1	Adaptation I/O Limits and Drum Channel Requirements
VOLUME	2	Sector Environment Summaries
VOLUME	3	Sector and Region Positional Data
VOLUME	4	Radar Adaptation Data
VOLUME	5	Voice and Data-Link Communications Adaptation Data
VOLUME	6	Airbase and BOMARC Squadron Adaptation Data
VOLUME	7	ADA Site Adaptation Data
VOLUME	10	Unified Adaptation Guide for Region and Sector Data
VOLUMES through	250 through 351	SAGE Unique-to-Site Environmental Data and Equipment Assignments

LIST OF EFFECTIVE PAGES

This page is a reference of changes to this volume and contains a complete index of all effective pages.

Page No.	Change Letter	Publication Date	Page No.	Change Letter	Publication Date
1 - 2	A	22 Mar 63			
3 - 4	Basic	15 Oct 62			
5	Basic	15 Oct 62			
6	A	22 Mar 63			
7	Basic	15 Oct 62			
8 - 11	A	22 Mar 63			
12 - 16	Basic	15 Oct 62			
17	A	22 Mar 63			

USER COMMITTEE SIGNATURES

	APPROVAL	CONCURRENCE	REVIEW
APASTO <i>Wm H. Aderhold</i> LT. COL., USAF	<i>WHA</i>		
SDC (DAS) <i>R. D. Marshall</i>		<i>Rm</i>	
WE/ADES <i>C. J. Lynn, Jr.</i>			<i>E. J. L.</i>
IBM <i>D. C. Lee</i>			<i>DCL</i>

The SAGE Unique-to-Site Equipment Review (USER) Committee signatures appearing on this page only apply to the following sections:

Section 2.4	IRI drum channel assignments
Section 6.2	Lateral-Tell input channel assignments
Section 6.3	Ground-to-ground data link output assignments
Section 6.4	Ground-to-air data link output assignments
Section 6.5	Teletype output assignments

All other sections of this document need not be reviewed by the USER committee. This page will only be reissued when changes to the above mentioned sections are made.

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1.0 SECTOR POSITIONAL DATA

SECTOR - SAN FRANCISCO

REGION - 28TH

AMP NO. 005

1.1 SECTOR PROGRAM BOUNDARIES

1.1.1 MODE I BOUNDARY

REF	LATITUDE	LONGITUDE
01	040 00 00	131 00 00
02	040 00 00	120 00 00
03	037 30 00	119 10 00
04	036 28 00	118 50 00
05	033 30 00	128 00 00
06	OPEN TO WEST	

1.1.2 MODE II BOUNDARIES

MODE IIA - PORTLAND			MODE IIB - LOS ANGELES		
REF	LATITUDE	LONGITUDE	REF	LATITUDE	LONGITUDE
01	044 00 00	133 10 00	01	040 00 00	131 00 00
02	044 00 00	120 50 00	02	040 00 00	120 00 00
03	044 00 00	120 00 00	03	037 30 00	119 10 00
04	040 00 00	120 00 00	04	036 28 00	118 50 00
05	037 30 00	119 10 00	05	035 00 00	119 00 00
06	036 28 00	118 50 00	06	032 45 00	121 25 00
07	033 30 00	128 00 00	07	032 45 00	127 35 00
08	OPEN TO WEST		08	OPEN TO WEST	

1.2 MAJOR WORLD GEOREFS SURROUNDING XI AREA

SWITCH CODE	GEOREF	SWITCH CODE	GEOREF	SWITCH CODE	GEOREF
1	CH	4	DH	7	EH
2	CJ	5	DJ	8	EJ
3	CK	6	DK	9	EK

1.3 ADJACENT AUTOMATIC AND MANUAL SECTORS

AUTOMATIC SECTOR NAME	AUTO LTR. DSG.	SECTOR REF.NO. (EQ.ID.)	D/L TIED	AMP NO.	SWITCH CODE	MAN LTR. DSG.	MANUAL SECTOR NAME **
LOS ANGELES	U	10	YES	017	0 *		
PORTLAND	M	1	YES	013	1		
PHOENIX	K	2		021	2		
SEATTLE	G	2		012	3		
					4		
RENO	X	5	YES	016	5		
					6		
					7		
					8		
SPOKANE	Y	9		015	9		

*SWITCH NO. 0 ON 10PB MODULES AND SWITCH NO. 10 ON 15PB MODULES

**ONLY MDC'S WITH DC TTY OUTPUT ARE INDICATED

1.4 LAND SEA LINES

		NORTH POINT			SOUTH POINT		
1	MODE I	040	29	49	125	18	13
2	MODE IIA	044	30	21	126	53	07
3	MODE IIB	040	29	49	125	18	13
					033	25	45
					120	06	54
					122	12	59
					120	06	54

1.5 AIR DEFENSE IDENTIFICATION ZONE - ADIZ/CADIZ

REF	LATITUDE	LONGITUDE
01	034 00 00	120 30 00
02	038 52 00	124 00 00
03	040 00 00	124 33 00
04	043 00 00	124 40 00
05	045 00 00	124 35 00

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1.6 SECTOR MINIMUM ENROUTE ALTITUDE. 17000 FEET

1.7 TACAN TRANSMITTER NEAREST SECTOR CENTER

	LATITUDE	LONGITUDE
	037 24 00	120 35 00

▷ 1.8.0 MAGNETIC VARIATION LINES

LINE NO.	VARIATION	NORTHERN POINTS		SOUTHERN POINTS	
		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE
1	20 DEG E	041 45 00	125 20 00	042 30 00	118 50 00
2	19 DEG E	040 06 00	124 45 00	041 48 00	118 25 00
3	18 DEG E	038 16 00	124 25 00	041 04 00	117 40 00
4	17 DEG E	036 25 00	124 00 00	038 25 00	118 57 00
5	16 DEG E	034 00 00	123 17 00	035 45 00	118 50 00
6	15 DEG E	031 10 00	122 35 00	033 15 00	118 30 00

▷ 1.8.1 MAGNETIC VARIATION AT SECTOR CENTER 18 DEGREES EAST

1.9 X2 DISPLAY DATA

X2 DISPLAY CENTER	X2 DISPLAY VERTICES			
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE
▷ 038 29 58 126 04 21	1	NE	044 41 46	117 52 40
	2	SE	032 21 42	118 27 47
	3	SW	031 51 15	132 56 27
	4	NW	044 00 37	135 00 00

2.0 RADAR DATA

2.1 LONG RANGE RADARS,
LRR-HF-ALRR

MULTIPLEXED GAP FILLER RADARS

SWCH. CODE*	SITE DESIG.	TIED HF'S	NO. OF DSG.	NO. OF LTR.		AMP NO.	SWCH. CODE	SITE DESIG.	SWCH. CODE	SITE DESIG.
				MODE	AMP NO.					
0										
1	P-12	2	8	IIA	069	0	P-12A		3	
						1	P-12B		4	
						2	P-12C		5	
2	P-33	2	C	IIA/OL	091					
3	TM-180	2	D	IIA	174					
4	**P-74	2	E	I	131					
5	**SM-157	2	F	IIA/OL	161	0	SM-157A		3	
						1	P-33A/SM-157B		4	
						2			5	
6	**M-96	2	G	I	035					
7	**P-58	0	H	I	114					
▷ 8	**P-37	2	J		095					
9	RP-15	2	K	IIB/OL	065					
10	P-2	2	L	IIB/OL	065	0	P-2A		3	
						1			4	
						2			5	
11	**P-38	2	M	I	096					
12										

13
*SAME AS REFERENCE NO. MINUS 1, ID CODE, AND WARNING LIGHT NUMBER. TO OBTAIN LRR PROGRAM CHANNEL NUMBER ADD 35, TO OBTAIN MKX PROGRAM CHANNEL NUMBER ADD 49

** 6 LRR'S WITH THE MOST MODE I COVERAGE

GFR IDENTITY NUMBER AND SWITCH CODE BASED ON IMPLEMENTATION OF SPCR 1579.

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2.2 GAP FILLER RADARS

GFR CH NO*	SITE IDENT	MODE	AMP NO.	TIED LRR SWCH CODE	GFR SWCH CODE**
▷ 0					
1	<u>P-2A</u>	I	057	10	0
2	<u>P-33A/SM-157B</u>	IIA	095	5	1
3	<u>SM-157A</u>	IIA	161	5	0
4					
5	<u>P-12A</u>	IIA	061	1	0
6	<u>P-12B</u>	IIA	061	1	1
7	<u>P-12C</u>	IIA	062	1	2
8					
9	THRU 34	BLANK			

*SAME AS REFERENCE NUMBER MINUS 1

**GFR SWITCH CODE BASED ON IMPLEMENTATION OF SPCR 1579

2.3 LOCATION OF POINT NOT WITHIN ANY HF SHADOW AREA

LATITUDE	LONGITUDE
037 28 00	126 38 00

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2.4 LRR DRUM CHANNEL ASSIGNMENTS

SDDU CONNECTIONS

SITE LOCATION	TELCO TERMINAL	I.B.M. TERMINAL DRUM FIELD 1 (35)	CHANNEL NUMBER	SITE IDENT
P-74	3F- 1	3F- 1	1	0100
	3F- 2	3F- 2	2	0100
SM-157	3F- 3	3F- 3	3	0101
	3F- 4	3F- 4	4	0101
P-33	3F- 5	3F- 5	5	0010
	3E- 6	3E- 6	6	0010
TM-180	3E- 7	3E- 7	7	0011
	3E- 8	3E- 8	8	0011
M-96	3E- 9	3E-11	11	0110
	3E-10	3E-12	12	0110
P-58	3D-11	3D-13	13	0111
	3D-12	3D-14	14	0111
	3D-13	3D-15	15	
	3D-14	3D-16	16	
	3D-15	3D-17	17	
	3C-16	3C-18	18	

DRUM FIELD 2 (37)

P-38	3C-17	3C-19	19	1011
	3C-18	3C-20	20	1011
P-2	3C-19	3C-21	21	1010
	3C-20	3C-22	22	1010
P-12	3B-21	3B-23	23	0001
	3B-22	3B-24	24	0001
P-37	3B-23	3B-25	25	1000
	3B-24	3B-26	26	1000
RP-15	3B-25	3B-29	29	1001
	3A-26	3B-30	30	1001
	3A-27	3A-31	31	
	3A-28	3A-32	32	
	3A-29	3A-33	33	
	3A-30	3A-34	34	
	4F-31	4F-35	35	
	4F-32	4F-36	36	

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6.6 LATERAL-TELL ROUTING TABLE - FIRST STOP

SECTOR DSG	SECTOR REFERENCE NUMBER				
	1ST ROUTE	2ND ROUTE	3RD ROUTE	4TH ROUTE	5TH ROUTE
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12	5	1			
13	1	5			
14					
15	5	1			
16	5	10		1	
17	10	5			
18					
19	5	1			
20	5	1			
21	5	10			
22	5	1			
23					
24					
25					
26					
27					
28					
29					
30					
31					

7.0 MANUAL INPUTS

SSR NO.	NAME/IDENT	TYPE	55-20 DESIG	SSR NO.	NAME/IDENT	TYPE	55-20 DESIG
01	28TH CC		TQ	10	STA 7 AND 17	PV	TS
02	STA 3 AND 13	AEW	HO	11	STA 9 AND 19	PV	UR
03	STA 5 AND 15	AEW	IV	12	TM-180	MDC	MD
04	STA 7 AND 17	AEW	TT	13	P-37	MDC	IA
05	STA 9 AND 19	AEW	UV	14	M-96	MDC	IE
06	STA 23	AEW	TR	15	P-59	MDC	UE
07	STA 33	AEW	MX	16	SM-156	MDC	XB
08	STA 3 AND 13	PV	MF	17			
09	STA 5 AND 15	PV	MS	18			

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AD8CP-E
AD8CP-T

RCAF

Ft/Lt G. R. Todd, RCAF
Santa Monica, California

SYSTEM DEVELOPMENT CORPORATION

USG Sec 2 (3)	4345
USG DAS (6)	4365
PPB SSG System Data (2)	20157
STB SSG Run Designer	4770
PTG Control Unit	Phoenix
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System Development Corporation,
Santa Monica, California
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